

# Work Order ID 76672

**\*76672\***

Page 1

November-18-11 1:30:16 PM

Item ID: D2886-1 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Cable Guard  
 Start Date: 18/11/2011 Start Qty: 2.00 **\*2\*** Cust Item ID:  
 Required Date: 25/11/2011 Req'd Qty: 2.00 **\*2\*** Customer:  
 Reference:

Approvals: Process Plan: M.L.J Date: 11/11/18 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2886	Rev A								
100		0.00							
<b>*100*</b>									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	CUT BLANKS AS PER FILE D2886-1								
140		0.00							
<b>*140*</b>	HAAS CNC VERTICAL MACHINING #1								
HAAS I	Memo	0.00							
HAAS CNC vertical machine #1	Machine as per folio D2886-1								
150		0.00							
<b>*150*</b>	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control									

B11-1-23 (3)

FK- 11/12/12

FK 11/12/12

3 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160	QC8- Inspect parts - second check	0.00							
<b>*160*</b>									
QC	Memo	0.00							
Quality Control									

190	Identify as per dwg & Stock Location <b>Start</b>	0.00							
<b>*190*</b>									
Packaging	Memo	0.00							
Packaging									

200	QC21- Final Inspection - Work Order Release	0.00							
<b>*200*</b>									
QC	Memo	0.00							
Quality Control									

**3** SP 11-12-13

11/12/13 **DF**  
**ME**  
11-12-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

November-18-11 1:30:21 PM

Page 1

Work Order ID: 76672

\*76672\*

Parent Item: D2886-1

\*D2886-1\*

Parent Item Name: Cable Guard

Start Date: 18/11/2011

Required Date: 25/11/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP A99.06.23New IssueDM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB1750X1000 X4800		Purchased	No			100	sf	0.0000	0.3333	0.701684			

\*MUHMWB1750X1000X4800\*

UHMW 1.75x1.00x48.00

\*\*

119145 B11-11-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 76672
<b>Description:</b> Guard		<b>Part Number:</b> D2886-1
<b>Inspection Dwg:</b> D2886	<b>Rev:</b> B	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.750	+/-0.010	1.745	✓		FK-04	Vern
2.875	+/-0.010	2.875	✓		"	"
11.063	+/-0.010	11.063	✓		FK-05	Tape
16.75	+/-0.030	16.75	✓		"	"
20.00	+/-0.030	20.00	✓		"	"
27.875	+/-0.010	27.875	✓		"	"
34.00	+/-0.030	34.00	✓		"	"
37.69	+/-0.030	37.69	✓		"	"
45.81	+/-0.030	45.81	✓		"	"
47.000	+/-0.010	47.00	✓		"	"
48.00	+/-0.030	48.00	✓		"	"
Ø0.260	+0.006/-0.001	.263	✓		FK-04	Vern
Ø0.438	+0.006/-0.001	.438	✓		"	"
Ø0.875	+0.010/-0.001	.875	✓		"	"
0.37 deep	+/-0.030	.37	✓		FK-06	Depth gauge
0.44 x 45°	+/-0.030 x +/-0.5°	.46	✓		FK-04	Vern
0.20 x 45°	+/-0.030 x +/-0.5°	.220	✓		"	"
0.70	+/-0.030	.692	✓		"	"
0.79	+/-0.030	.784	✓		"	"
0.95	+/-0.030	.951	✓		"	"
0.78	+/-0.030	.781	✓		"	"
0.33	+/-0.030	.33	✓		FK-06	Depth gauge
0.50	+/-0.030	.50	✓		FK-04	Vern
0.64 ✓	+/-0.030	.625	✓		"	"
R0.06 ✓	+/-0.030	.06	✓		rad gauge	
0.14 ✓	+/-0.030	.16	✓		FK-06	Depth gauge
0.36 ✓	+/-0.030	.384	✓		"	"
0.53 ✓	+/-0.030	.54	✓		FK-04	Vern
0.88 ✓	+/-0.030	.88	✓		"	"
1.31 ✓	+/-0.030	1.307	✓		"	"

<b>Measured by:</b> P.K.	<b>Audited by:</b> [Signature]	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 11/12/12	<b>Date:</b> 11/12/12	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	06.08.30	New Issue	KJ/JLM	[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

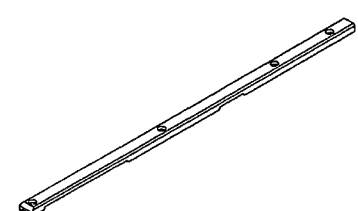
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**NOTE:** Date & initial all entries



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WORK ORDER  
NO. 76672 M.C.J  
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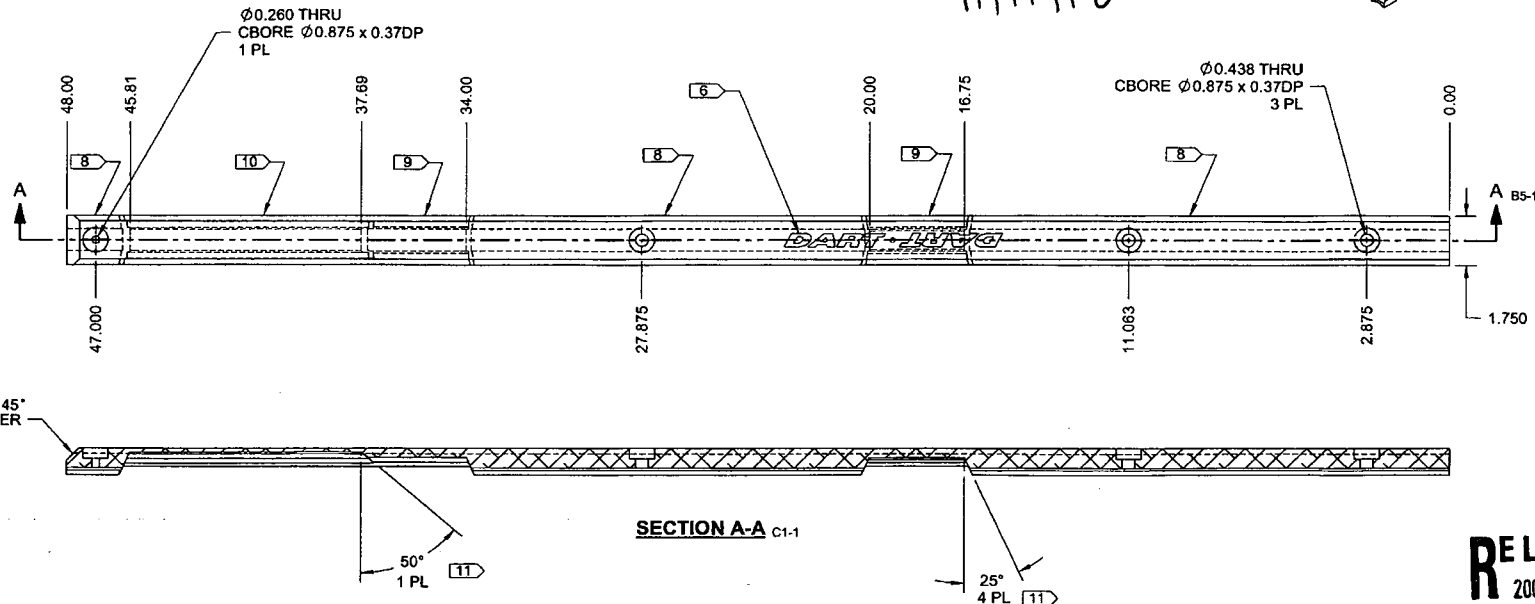
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B

B

A

A



**D2886-1 GUARD**

**RELEASED**  
2009-12-02  
WD

**NOTES:**

- 1) MATERIAL: UHMW BLACK PER DART SPEC. MUHMB10
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.020 TO 0.040 MAX
- 6) IDENTIFICATION: ENGRAVE TWO DART LOGOS (OPPOSITE AS SHOWN) ON NEAR SIDE TO MAX DEPTH OF 0.015 AND MIN TOOL RAD OF R0.250. ENGRAVE P/N ON FAR SIDE TO MAX DEPTH OF 0.010 AND MIN TOOL RAD OF R0.010.
- 7) WEIGHT: 2.22 lbs
- 8) MACHINE CONSTANT SECTION B-B (ZN B7-3)
- 9) MACHINE CONSTANT SECTION C-C (ZN B5-3)
- 10) MACHINE CONSTANT SECTION D-D (ZN B3-3)
- 11) ANGLE OF TRANSITION AS SHOWN BETWEEN CONSTANT SECTIONS, WITH MIN RADIUS OF TRANSITION OF R0.25.  $\triangle B$

B	REDRAW, -1 PROFILE CHGD TO AVOID SADDLE RIDGES (ZN B3-3), R0.25 WAS R0.50 (ZN A4-1)	CP	09.11.12
A	NEW ISSUE	CP	99.06.23
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.11.12		
<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D2886</b> REV. B SHEET 1 OF 3 TITLE <b>GUARD</b> SCALE NTS <small>COPYRIGHT © 1999 BY DART AEROSPACE LTD  THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>			

8 7 6 5 4 3 2 1

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

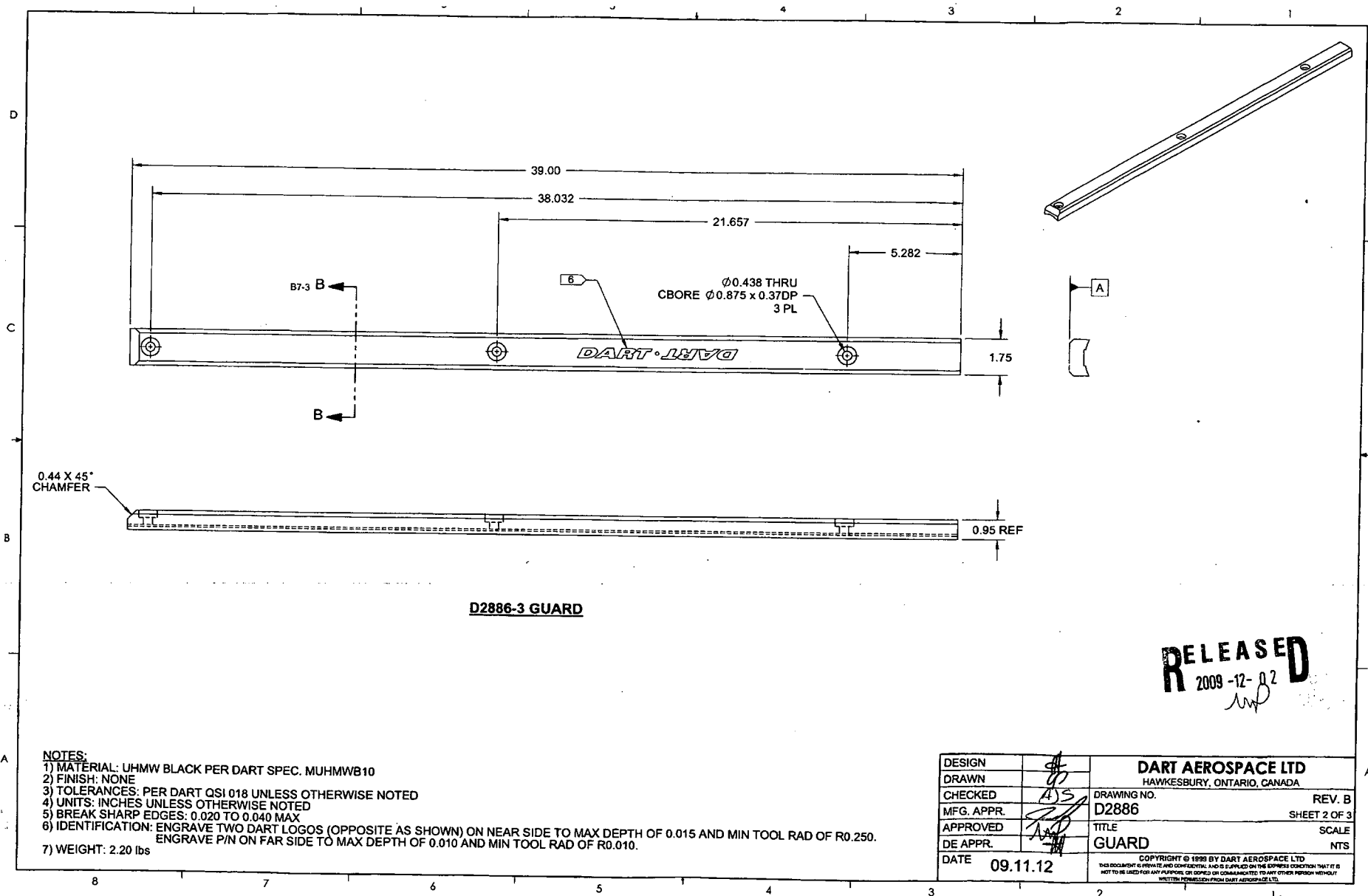
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

76672








**D2886-3 GUARD**

**RELEASED**  
2009-12-02

**NOTES:**

- 1) MATERIAL: UHMW BLACK PER DART SPEC. MUHMB10
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.020 TO 0.040 MAX
- 6) IDENTIFICATION: ENGRAVE TWO DART LOGOS (OPPOSITE AS SHOWN) ON NEAR SIDE TO MAX DEPTH OF 0.015 AND MIN TOOL RAD OF R0.250. ENGRAVE P/N ON FAR SIDE TO MAX DEPTH OF 0.010 AND MIN TOOL RAD OF R0.010.
- 7) WEIGHT: 2.20 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D2886	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		GUARD	NTS
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W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

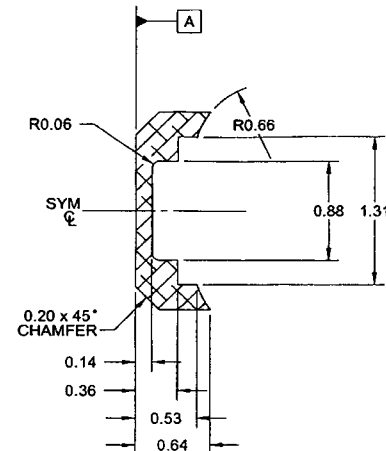
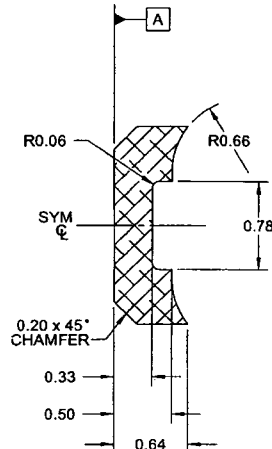
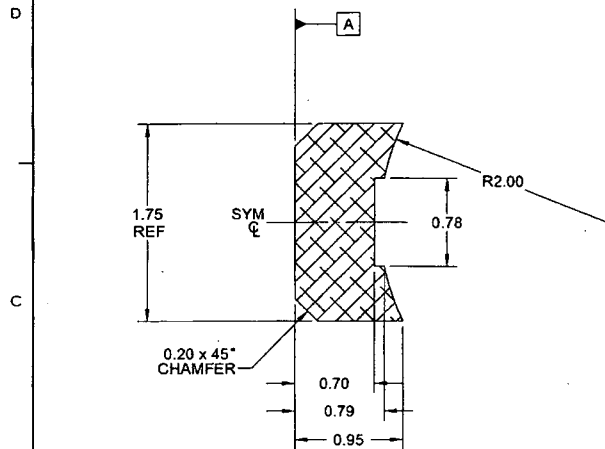
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

76672

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2009-12-02

DESIGN	#	<b>DART AEROSPACE LTD</b>	
DRAWN	BS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	BS	DRAWING NO.	REV. B
MFG. APPR.	BS	D2886	SHEET 3 OF 3
APPROVED	BS	TITLE	SCALE
DE APPR.	#	GUARD	NTS
DATE	09.11.12	COPYRIGHT © 1998 BY DART AEROSPACE LTD	
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8 7 6 5 4 3 2 1

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